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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,440	11/07/2003	Fumito Nariyuki	FS-F03211-01	9406

37398 7590 07/26/2005

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EXAMINER	
CHEA, THORL	

ART UNIT	PAPER NUMBER
1752	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/702,440	NARIYUKI, FUMITO	
	Examiner	Art Unit	
	Thorl Chea	1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,7-10,12-14 and 16-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,7-10,12-14 and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the unit on the Absorption (abs) axe was not provided . Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3, 7-8, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP 1220026 (EP'026), Siga et al (US Patent No. 4,332,889) and Toya (US Patent No. 5,698,380).

EP'026 discloses a photothermographic material having a photosensitive silver halide, a reducing agent for silver ion, a binder and a non-photosensitive organic silver salt. See the non-photosensitive organic silver salt has silver behenate from 90 to 100 mole % page 46, claims 3-5 ; silver halide preferably has a small grain size so as to reduce the white turbidness after formation of an image; the size of the silver halide grains is from 20 nm to 120 nm on page 16, [0094]. the silver halide include preferred silver bromide and silver iodobromide on page 16, [0092]; the amount of the photosensitive silver halide, in term of coated silver amount per m^2 of the photosensitive material is from 0.03 to 0.6 g/m^2 on page 18, [0114]; the bisphenol reducing agent in on pages 8-9, [0060]; the organic polyhalogen compound on pages 20-21, [0141] to [0145]; the hydrogen bonding compound on page 14,[0088]; and the toning agent and the ultrahigh contrast-providing agent known as development accelerator on pages 23, [0151] to [0151].

Siga et al disclose in column 6 lines 43-68 discloses that "From the view point of sensitivity of image forming material, the silver halide component, the silver halide component is desired to contain beside silver iodide, at least two mole percent based on silver halide component, and from the viewpoint of stability of the raw image forming material, it is desirable that the silver halide component contains besides silver iodide, silver bromide rather than silver chloride. Therefore, the most preferred silver halide component consist of silver iodide and silver bromide. Silver iodide and silver bromide may be provide in the form of either mixture thereof or mixed

crystal thereof. The molar ratio of silver iodide to silver bromide may be preferably 30/70 to 98/2, more preferably 50/50 to 95/5. In column 7 lines 1-22, it is disclosed that silver iodide and any other silver halide are prepared by the known method commonly employed in the photographic film manufacture, may be formulated as silver halide component together with other component such as silver salt of long chain fatty acid.

The disclosure of the EP'026 differs from the claimed invention in its failure to disclose the total silver iodide content of the photosensitive id 40 mol % to 100 mol%. However, it has been known in Siga et al to provide silver halide within the amount as claimed in view point of balancing the sensitivity and the stability of the image forming material such as disclosed in the above paragraph. Therefore, it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver iodobromide having silver iodide and silver bromide taught in Siga et al in the material of EP'026 for same reason disclosed in Siga et al, and thereby provide a material as claimed.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP'026 and Siga et al (US Patent No. 4,332,889) as applied to claims 1, 3, 7-8, 16-18 above, and further in view of Tsuzuki (US Patent No. 5,677,121). Tsuzuki discloses silver salt of an organic acid comprises silver salt of behenic acid not less than 35 mole % to 90 mole % to provide a heat-developable material that has excellent graininess and highly definite image. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver salt of an organic acid within the scope taught in Tsuzuki in the material taught in EP'026 with a reasonable expectation of providing to provide a heat-developable

material which has excellent graininess and highly definite image, and thereby provide a material as claimed.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP'026 and Siga et al (US Patent No. 4,332,889) as applied to claims 1, 3, 7-8, 16-18 above, and further in view of Goto et al (US Patent No. 6,787,298) or Farid et al (.US Patent No. 5,747,235). EP'026 may not discloses a compound in which a one-electron oxidant formed by one-electron oxidation can release one or more electron in claim 14, but this compound has been known in Goto et al and Farid. See compound of Goto et al in columns 2-4, and Farid in the abstract and columns 16-18. The compound having property as claimed and useful as sensitizer for silver halide emulsion. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the sensitizer taught in Goto et al or Farid et al in the material of EP'026 for same reason, and thereby provide a material as claimed.

6. Claims 10, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination EP'026 and Siga et al (US Patent No. 4,332,889) as applied to claims 1, 3, 7-8, 16-18 above, and further in view of Toya et al (5,998,126). EP'026 may not disclose the process of exposing the photothermographic material using a semiconductor laser having emission peak intensity at a wavelength of from 350 nm to 450 nm as a light source, but Toya et al in column 2, lines 1-12 discloses the use of laser source that produce laser having appropriate wavelength of exposure from 300 nm to 700 nm. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to select light source accordingly to the sensitivity to the image forming material including the laser taught in Toya et al, and thereby provide a process as claimed.

7. Claims 1, 3, 7-10, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Uytterhoeven et al (US Patent No. 6,143,488) and EP 01096310 (EP'310). Uytterhoven et al disclose a photothermographic material substantially as claimed. See abstract silver halide, the silver salt of an organic acid, an organic reducing for silver salt of an organic acid, binder and wherein silver halide having at least 80 mole % silver iodide; the photosensitive silver halide particle having a diameter, determined by electron microscopy of ≤ in column 6, lines 46-053; silver iodide including the alpha, beta and gamma phase in column 6, lines 6-25; silver salt of an organic acid including silver behenate in column 5, lines 25-45; antifoggants including polyhalogenated compound in column 9, lines 20-25; and the recording process using uv light in column 11, lines 15-35. The material may be exposed with radiation between X-ray wavelength and a 5 microns wavelength with the image either being obtained by pixel-wise exposure with a finely focus light source such as CRT light source; a UV, visible or IR wavelength laser; or by directed exposure to the object itself or an image therefrom with an appropriate illumination e.g. UV, visible or IR light. See column 11, lines 15-34. EP'310 on page 37, [0090] discloses the use the amount of silver halide from 0.03 to 0.6 g/m^2; the compound having phosphoryl group on page 20, [0060]; reducing agent on page 6, [0038]; the organic polyhalogenated compound on page 65, [0276], [0277]; the process for forming an image including imagewise exposing using laser having laser output at least 10 mW on page 53, [0214], and silver halide grains having grain size between 20 nm to 120 nm on page 36, [0077].

Uytterhoeven et al may not disclose the coating amount of silver halide in term of silver is 0.0005 g/m^2 or more and 0.4 g/m^2 or less as claimed, but this amount has been known in EP'310

wherein the amount of silver of from 0.03 g/m^2 to 0.6 g/m^2 , and it would have been obvious to the worker of ordinary skill in the at the time the invention was made to use the silver halide within the silver halide taught in Uytterhoeven et al within the conventional amount taught EP'310 with an expectation of providing a sufficient image density, and thereby provide an invention as claimed.

8. Claim 16 rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Uytterhoeven et al (US Patent No. 6,143,488) and EP 01096310 (EP'310) as applied to claims 1-13, 17-20 above, and further in view of Tsuzuki (US Patent No. 5,677,121). Tsuzuki discloses silver salt of an organic acid comprises silver salt of behenic acid not less than 35 mole % to 90 mole % to provide a heat-developable material that has excellent graininess and highly definite image. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver salt of an organic acid within the scope taught in Tsuzuki in the material taught in Uytterhoeven et al with a reasonable expectation of providing to provide a heat-developable material which has excellent graininess and highly definite image, and thereby provide a material as claimed.

9. Claims 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Uytterhoeven et al (US Patent No. 6,143,488) and EP 01096310 (EP'310) as applied to claims 1-13, 17-20 above, and further in view of either Goto et al (US Patent No. 6,787,298) or Farid et al (.US Patent No. 5,747,235). See compound of Goto et al in columns 2-4, and Farid in the abstract and columns 16-18. The compound having property as claimed and useful as sensitizer for silver halide emulsion. It would have been obvious to the worker of ordinary skill in the art

at the time the invention was made to use the sensitizer taught in Goto et al or Farid et al in the material of Uytterhoeven et al for same reason, and thereby provide a material as claimed.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1, 3, 7-9, 16-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No 10/635,486 (Pub. No. 2004,0038161) in view of Toya (US Patent No. 5,698,380) and Tsuzuki (US Patent No. 5,677,121. The claims differ in the amount of silver halide and the silver behenate contained in the non-photosensitive organic silver salt. Toya discloses a heat developable material containing a silver halide grains have an average size of 0.1 nm to 100 nm and have average coverage rate of 0.005 g/m^2 to 1 g/m^2. See column 21-22, Table 2; column 2, lines 1-5; column 4, lines 29-33 the reducing agent in column 6, formula (A). Tsuzuki discloses silver salt of an organic acid comprises silver salt of behenic acid not less than 35 mole % to 90 mole % to provide a heat-developable material that has excellent graininess and highly definite image. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the silver halide within the silver halide taught in Toya in

the material claimed copending Application No 10/635,486 in with an expectation of producing a heat developable material with sufficient silver image density, and thereby provide the claimed invention.

This is a provisional obviousness-type double patenting rejection.

Response to Arguments

12. The rejections of claims 1-20 are rejected under 35 U.S.C. 103(a) as being obvious over either Ohzeki (Pub No. US 2004/0038161), Fukui et al (Pub. No. 2003/0207216), Yoshioka et al (Pub. NO. 2003/0235794) or Ohzeki et al (Pub. No. 2003/0194,659) in view of Toya (US Patent No.5,698,380) in view of the statement that "at the time the present application was made, the Patent Publication No. Pub No. US 2004/0038161, Pub. No. 2003/0207216, Pub. NO. 2003/0235794) and Pub. No. 2003/0194,659, owned by Fuji Photo Film, Ltd.

13. The objected to the specification in previous office action, paragraph 1, is maintained. It is the Examiner's position that the amount of absorbance cannot be determined from the drawing shown in (abs) axis in the absence of providing the scale associated with the axis. The Fig. 8-1 from Nebette's 8th Edition is irrelevant to the present invention. The absence of showing the units on the Y-axis shown in the Nebette's 8th Edition is not necessarily meant the Drawing present in the invention is proper. The Fig. 8-1 from Nebette's 8th provided by the applicants clearly shown the units associated with the Y-axis, and one who view the drawing would have understood from the description and the drawing shown therein.

14. Applicant's arguments filed May 10, 2005 have been fully considered but they are not persuasive for the reason set forth in the rejection above. The size of silver halide grain, the amount thereof, the silver iodide content in the silver halide and the silver behenate has been

commonly known in the applied prior art disclosed above. The language such as "wherein the photosensitive silver halide is formed in a state wherein the non-photosensitive organic silver salt is not present" is related to the claiming of silver halide made by a process. This processing step fails to further limit the composition of the phothermographic material. "(E)ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of prior art, the claim is unpatentable even though the prior art product was made by different process." In re Thorpe 777 F.2d 695, 698, 227 USPQ 694, 966 (Fed. Cir. 1985).

The applicants states that "that the amendments to the claims overcome this rejection. The present inventor found that development is suppressed œs the silver iodide content in the photosensitive silver halide increases. The problem of suppression of development is solved in the present invention by decreasing the coating amount of the photosensitive silver halide having a high silver iodide content.

A newly discovered property does not necessarily mean the product is unobvious, since this property may be inherent in the prior art. In re Best 195 USPQ 430 (CCPA 1977); In re Swineherd 169 USPO 226 (CCA 1971). It would have been obvious to provide silver bromoiodide with low or high silver iodide in combination with silver bromide accordingly to intended used such as in Siga et al. The silver halide contains high content of silver bromide produce higher sensitivity; whereas silver halide contains high iodide content provide more stability of raw material. Accordingly, the invention as claimed would have been found prima

facie obvious over the combination of the applied prior art such as provided in the rejections above.

The rejection under the judicially created doctrine of obviousness-type double patenting set forth in the paragraph 11 above is maintained since the applicants fails to provide a convincing evidence as to why such rejection is improper and the filing of terminal disclaimer is not necessary.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea
July 14, 2005

Thorl Chea
Primary Examiner
Art Unit 1752